Datasheet QP018-UDP-CMP
Ultrasonic Density & Concentration Probe

Principle

Ultrasonic Spectroscopy

Description

Model CMP is designed to be installed in process lines to measure the acoustical physical properties (APP's) of chemicals, emulsions and slurries. These APP's could be density, speed of sound, attenuation and temperature. In the QA04 analyzer, the physical APP's are related to dissolved and suspended solids concentration at sub-ppm accuracy.

The Arenal ultrasonic probes are fit to be applied in flows up to 7 m/s. The ceramic sensor is made from one of the toughest materials on earth: Sintered Silicon Carbide (SSiC). They are much more wear resistant compared to all other ceramics. Secondly the acoustical and physical properties of SSiC are perfect for the applications in most demanding chemical applications. The standard sensing element is quartz glass, one of the most chemical resistant materials on earth as well and perfect acoustical properties.

Features

- The probe does not erode, it is chemical and wear resistant
- Very stable measurement
- Suits all (mixed) chemicals in any concentration
- For low and medium temperature slurries

Specification

- Quartz sensing element in ceramic (SSiC) housing
- Tefzel double o-rings
- Coaxial cable connection
- Suits density from 0 up to 3000 g/l
- Suits temperatures up to 130 degC

Connectivity

- Coaxial cable or LEMO 1V connector

Mounting

- Flanged on the SSiC housing in 3" flange

Engineering specifications

Make: Arenal PCS BV, The Netherlands
Advanced Ultrasonic Probe for (aggressive) chemicals
Material sensor: Quartz and Sintered Silicon Carbide
Material housing: SSiC
Temperature range 0-55 degC or 0-130 degC
Fixing: 3" flange

Product variations

QP018-UDP-CMP-MT-SIC-QTZ-D40-L150
Model for inline applications in demanding chemical processes.
> Composite materials, ceramic and quartz
> The sensor is mounted on a 3" flange.
> Mounting is from inside to outside the pipe
> Fixed LEMO 1V connector

Dimensions

Length = 147 mm, d=40 mm